

**STATEMENT OF
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UNITED STATES DEPARTMENT OF THE INTERIOR
BEFORE THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE**

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Mr. Chairman and Members of the Committee, I appreciate the opportunity to appear here today to highlight for you and Members of the Committee the important and vital role Federal offshore lands continue to play with respect to our Nation's energy future.

America faces an energy challenge. Energy use sustains our economy and our quality of life, but high prices and increasing dependence on foreign energy supplies raises important national policy issues. There is no one single solution. Achieving the goal of secure, affordable and environmentally sound energy will require diligent, concerted efforts on many fronts on both the supply and demand sides of the energy equation.

President Bush's National Energy Policy (NEP) report laid out a comprehensive, long-term energy strategy for securing America's energy future. That strategy recognizes that to reduce our rising dependence on foreign energy supplies, we must also increase domestic production, while pursuing energy conservation and the use of alternative and renewable energy sources.

Most media coverage focuses on the parts of the National Energy Policy that discuss production of traditional energy, but increased energy conservation and alternative and renewable sources are also critical components of the President's balanced, comprehensive policy. Good stewardship of resources dictates that we use energy efficiently and conserve resources. Thus, fossil fuel development is only a part of the solution to our Nation's energy issues.

The Outer Continental Shelf Lands Act directs the Secretary of the Interior to make resources available to meet the nation's energy needs. The accompanying Congressional Declaration of Policy states, "*The OCS is a vital national resource reserve held by the Federal Government for the public, which should be made available for expeditious and orderly development.*" As the Department of the Interior's offshore resource management agency, the Minerals Management Service (MMS) has a focused and well established ocean mandate – to balance the exploration and development of oil, gas, and marine minerals resources of the Outer Continental Shelf (OCS) with environmental protection and safety.

Current Energy Picture

Oil is vital to the American economy. Currently, it supplies more than 40 percent of our total energy demands and more than 99 percent of the fuel we use for cars and trucks. According to the Energy Information Administration, over the next 20 years Americans' demand for energy is

expected to grow at an annual rate of 1.4 percent. This growth projection incorporates continued gains in energy efficiency and movement away from energy-intensive manufacturing to service industries. Despite a continuing emphasis on expanding other sources of energy, petroleum products and natural gas are projected to account for almost 65 percent of domestic energy consumption in 2025, a slightly larger share than today.

U.S. natural gas consumption is expected to grow from 22 trillion cubic feet (tcf) in 2003 to almost 31 tcf in 2025. Domestic production, however, is predicted to grow from 19.1 tcf to 21.8 tcf, meeting only about 30 percent of projected growth demand. In the past, any difference between the growth in demand and the growth in domestic production was predominantly met by imports of gas from Canada. However, Canada's National Energy Board has concluded that their future production will not support increased U.S. import requirements. Most additional supplies will need to come from Alaskan natural gas, coalbed methane, the OCS, imports of LNG, or possibly other undeveloped sources.

Predictably, markets are responding to this outlook with higher energy prices, and an increased demand for OCS resources. This is apparent from recent interest in lease sales and an increasing pace of exploration and development. The mandate of the OCSLA and prudent policy considerations also warrant an increased examination of the OCS energy option.

Offshore Federal OCS Oil and Natural Gas Program

The Federal OCS is a major supplier of oil and natural gas for the domestic market, contributing more oil and natural gas for U.S. consumption than any single state or country in the world. As steward of the mineral resources on the 1.76 billion acres of the Nation's OCS, MMS has, since 1982, managed OCS production of 9.6 trillion barrels of oil and more than 109 tcf of natural gas for U.S. consumption.

Today, MMS administers approximately 8,200 leases and oversees approximately 4000 facilities on the OCS. This compares to about 2,800 leases and 2000 facilities in 1982. OCS production accounts for over 30 percent of the Nation's domestic oil production and approximately 23 percent of our domestic natural gas production. Within the next 5 years, offshore production will likely account for more than 40 percent of oil and 26 percent of U.S. natural gas production, owing primarily to deep water discoveries.

As the OCS resource management agency, MMS has worked diligently for over 20 years to create a framework for OCS mineral resource development. Principles guiding our management of the resources of the OCS include: conservation of resources by providing for their most efficient use; assurance of a fair and equitable return to the public for rights conveyed; protection of the human, marine, and coastal environments; involvement of interested and affected parties in planning and decision-making; and minimization of conflicts between mineral activities and other uses of the OCS. MMS also has over two decades of experience working with coastal states regarding coastal zone issues related to development on the OCS. The U.S. Commission on Ocean Policy in its report, "An Ocean Blueprint for the 21st Century," stated, "the scope and comprehensiveness of the OCS oil and gas program can be a model for the management of a wide variety of offshore activities."

Economic/Energy Benefits from the Offshore Program (revenues, resource estimates, hydrates)

OCS lease sales and production have generated more than \$156 billion in revenue from bonus bids, rentals, and royalty payments. The OCS oil and gas industry directly employs about 42,000 workers, mostly in the Gulf of Mexico area. Spending by suppliers and other companies that support the industry, as well as by employee households, account for another 90,000 or more jobs throughout the country.

The billions of dollars in revenue collected by MMS annually from energy companies for offshore and onshore oil and gas leasing and production is one of the largest sources of non-tax revenue to the Federal Government. OCS leasing and production provides the majority of oil and gas annual revenue collected by MMS—about 66 percent of the \$8 billion collected in FY 2004. Annually, nearly \$1 billion from OCS revenues go into the Land and Water Conservation fund for the acquisition and development of state and Federal park and recreation lands. Additionally, more than \$3 billion from OCS oil and gas production royalties has been disbursed to the Historic Preservation Fund to help protect and preserve hundreds of American battle fields, historic building, historic landmarks, and tribal properties and cultural traditions.

National Energy Policy Role

The President's NEP provides us with directives to diversify and increase energy supplies, encourage conservation, and ensure adequate energy distribution. One of the NEP challenges is to increase energy supplies while protecting the environment. MMS has implemented a number of NEP directives to increase domestic energy supplies and enhance national energy security by ensuring continued access to Federal lands for domestic energy development, and by expediting permits and other federal actions necessary for energy-related project approvals.

For example, we are helping to ensure that the OCS remains a solid contributor to the Nation's energy and economic security by holding OCS lease sales in available areas on schedule. Since May 2001, DOI has held 14 OCS oil and natural gas lease sales on schedule while going through a comprehensive consultation process with other Federal agencies, State and local governments, and the public. These sales resulted in leasing of almost 19 million acres of OCS lands to industry for oil and gas exploration and development, and generated about \$2.4 billion dollars in bonus bid revenue (not counting future royalties and rentals) for the U.S. Treasury. Production from leases issued as a result of these sales will contribute substantially to future domestic oil and gas production. MMS is on track for completing the next 5-Year Program by July 2007, which will establish the schedule for future OCS lease sales during the 2007-2012 timeframe.

The NEP also recommended that we consider economic incentives for environmentally sound offshore oil and gas development where warranted by specific circumstances. MMS has established a suite of economic incentives to promote discovery of new sources of energy for the Nation and stimulate domestic oil and natural gas production. For 2001-2005 OCS lease sales, we continued the royalty incentive program—first established by the Deep Water Royalty Relief Act of 1995—to promote interest in deep water leases, and expanded the incentive program to

promote development of new natural gas supplies from deep horizons in the Gulf's shallow waters. A new regulation in January 2004 extended the deep gas incentive to leases issued before the incentives were first provided in 2001, to promote additional deep drilling for natural gas on the shelf. MMS has also developed policies for extending lease terms to aid in planning wells to be drilled to sub-salt and ultra-deep prospects, accounting for the additional complexity and cost of planning and drilling such wells.

MMS has also provided economic incentives for all Alaska OCS lease sales to promote leasing interest and encourage oil and gas exploration development in this area of high cost and little infrastructure.

The NEP also directs us to permit energy production in an environmentally sound manner by expediting permits and other Federal actions necessary for energy-related project approvals. To help streamline our procedures, the offshore program is implementing an e-Government Transformation project known as OCS Connect, to reform and streamline MMS's offshore program operations by 2008. It is foremost an integrated business process re-engineering project that will change the manner in which MMS delivers its mission. By moving to online service delivery, our organization will be more "connected" to our customers: industry, citizens and other government agencies. OCS Connect will:

- Maximize citizen involvement by delivering essential information and allowing input via the Internet
- Streamline mission delivery by automating major business transactions and providing "digital" data management, such as plan review, resulting in more timely decisions
- Simplify and unify government by minimizing redundant reporting, and streamlining government interactions with industry and the public
- Leverage market-based practices by using common oil and gas standards and solutions (e.g., data model, exchange standards)
- Ensure timely approvals of plans and permits

In addition, we have been working closely with other agencies to develop a more efficient means of issuing permits. We have been working with NOAA to achieve prompt and efficient consultations under the Endangered Species Act and rulemakings under the Marine Mammal Protection Act; and on revisions to their Coastal Zone Management Act consistency regulations.

MMS also is working in partnership with the U.S. Coast Guard to improve regulatory oversight of oil and gas operations where there is overlapping jurisdiction. Under a new Memorandum of Understanding (MOU), we have streamlined the process for inspections of offshore facilities, improving government efficiency and reducing a reporting burden on industry. The NEP also directed that the Administration determine whether or not to resume deliveries of oil for the Strategic Petroleum Reserve (SPR), the nation's supply of emergency crude oil. Responding to a Presidential directive issued in November 2001, the Department of the Interior (DOI), in partnership with the Department of Energy, launched the SPR Fill Initiative to fill the SPR to 700 million barrels using royalty in kind oil produced from OCS Gulf of Mexico leases. This initiative should be completed by summer 2005.

Current Status

Technology Advances

In the last 30 years, technological advancements in the offshore oil and natural gas industry that make production safer and more environmentally sound have occurred in every step of the process. In the area of exploration, technological advances help companies better identify prospects, allow for more effective well placement, improve the development of resources, reduce the number of dry holes, and cut exploration time. This reduces the footprint left by exploration, generates less waste, and improves understanding of reservoirs to improve production.

Once production begins, combined with advances in extended reach and directional drilling advanced recovery techniques allow for increased production, recovering 50 percent more oil and 75 percent more gas from a well than was recovered 30 years ago. Improved reservoir management reduces the amount of water produced. Other improvements include better treatment of produced water, better air pollution control, more energy-efficient production, and reduced emissions of greenhouse gases.

Additionally, using new techniques in reservoir management, more oil and natural gas can be produced today, with fewer wells than 30 years ago. Technology applied to reservoir management includes artificial lift, for increased production; downhole oil/water separation; and advanced data management. And advancements in materials engineering have led to the increased use of advanced composite materials for parts of structures and mooring systems. These materials are strong, lightweight, and able to withstand the offshore environment. This allows for platforms that are lighter and smaller, leaving a smaller footprint. These platforms also require less maintenance and repair.

Deep Water Gulf of Mexico

The strongest trend on the OCS today is the continuing development of the Gulf of Mexico deep water acreage. The U.S. is now in its ninth year of sustained expansion of domestic oil and gas development in the deep water area of the Gulf of Mexico (GOM). Deep water means that from water surface to where a drill bit first touches mud is at least 1,000 feet — that is almost twice the height of the Washington Monument. So for a moment imagine a floating drill ship perched in water the height of two Washington Monuments, subject to the forces of waves and ocean currents, maintaining its position while remotely directing drilling operations through 1,000 feet or more of pipe casing to reach a reservoir of oil or natural gas, while controlling for extreme temperature and pressure.

In 2004, operators announced 14 new deep water producing projects and 12 new deep water discoveries. Anticipated production from these facilities will help sustain production increases in deep water, and fields with names such as *Thunder Horse*, *Atlantis*, and *Mad Dog* will dramatically raise production in 2005 and 2006. We expect that it will be several years before deep water areas of the Gulf of Mexico reach their full potential. The continued use of royalty incentives in the deep waters of the Gulf is intended to keep industry moving forward on new

technologies and exploring deeper water frontiers. The deep water activity in the Gulf of Mexico has been a major success story. Deep water oil production has risen 386 percent and deep water gas production is up 407 percent since 1996.

There are now about 140 deep water discoveries of which more than 90 are producing. This has helped to increase total offshore production from 980,000 barrels per day in 1995 to 1.7 million barrels per day in 2003. Additional deep water rigs are being built or moved to the Gulf from other parts of the world. The number of deep water exploration wells drilled in 2004 increased 27 percent compared to 2003.

This steady advancement in deep water production over the last decade and for the coming decade would not be possible without major advances in offshore technologies that are truly amazing. Advances that allow remote control of drilling operations from control rooms that are miles away; dynamic positioning of drill ships using multiple engines that are the size of the meeting room we are sitting in; floating production platforms with surface area the size of football fields; anchoring cables to hold facilities in place that are made up of a combination of traditional steel and synthetic materials; pipe laying ships that can lay miles of pipeline in thousands of feet of water. In fact, the recent Thunder Horse development required over one hundred technological advancements — things that had not been done before — to bring online the largest oil field discovered in the U.S. in the last 30 years.

The industry ingenuity that we see in deep water is the same approach that is being used in deep shelf drilling operations on the traditional shelf where operators are targeting deep natural gas reservoirs that require drilling 15,000, 20,000 and in some instances 35,000 feet deep through extremely high temperature and pressure conditions.

As we sit here, operators are drilling the Blackbeard project to more than 35,000 feet – 6 miles. This well will take almost a year to drill and there is no ironclad guarantee of success.

Managing Other Uses

For much of the past 50 years offshore development has been largely focused on producing oil and natural gas. However, over the last decade MMS has nurtured the development of an OCS hard minerals program. MMS has established partnerships with 14 coastal states focusing on collecting and providing geologic and environmental information to identify and make available sand deposits in Federal waters suitable for beach nourishment and wetlands protection projects.

To date, more than 23 million cubic yards of OCS sand has been used in 15 projects that nourished 76 miles of shoreline in Florida, Louisiana, Maryland, South Carolina, and Virginia. Most recently, Florida has come back to MMS to identify possible OCS sand sources to repair coastlines damaged by the 2004 hurricane season, and Louisiana, which has lost half a million acres of wetlands to coastal erosion since the 1950s, has requested OCS sand to restore barrier islands and coastal wetlands.

The oceans may also hold the key to realizing significant potential new energy sources to support America's growing energy needs—for example: natural gas hydrates, and renewable energy such as wind, wave, and solar.

In addition, the oil and gas industry is contemplating ancillary projects, such as staging and emergency medical facilities, to support ongoing activities in the deep water Gulf of Mexico. MMS, as a leader in reviewing environmental and safety issues pertaining to facilities placed on the OCS, is actively providing guidance and review of the various new technologies and projects proposed for offshore areas.

MMS' expertise in resource assessment, regulation of offshore energy and mineral development, environmental protection, and design, fabrication, construction, operation, maintenance, and inspection of offshore facilities has put the Agency in the forefront of planning for appropriate government oversight for such projects.

For example, to support the increased need for liquefied natural gas (LNG) imports, and for safety and efficiency reasons, many proposed LNG terminals may be located on the OCS, with some terminals using existing OCS infrastructure such as pipelines, platforms, and salt cavern storage.

The *U.S. Commission on Ocean Policy* recommended the development of legislation providing for the comprehensive management of offshore renewable energy development as part of a coordinated offshore management regime. The *Commission's* report cited the Department's experience in managing the oil, gas, and mineral programs on the OCS as providing a successful management model for a wide variety of offshore activities. The Administration proposed legislation during the 108th Congress, which has been reintroduced this Congress, that would amend the Outer Continental Shelf Lands Act by establishing a uniform permitting process coordinated across appropriate Federal agencies, with DOI serving as the lead Federal agency. The Administration's proposed legislation would direct the Secretary of the Interior to establish an authorization process and regulatory framework for non-traditional energy projects including, but not limited to, renewable energy projects such as wind, wave, and solar energy. The Administration's bill would also authorize DOI to permit OCS facilities to be converted to other approved uses. The President's *Ocean Action Plan*, in response to the final report and recommendations of the *U.S. Commission on Ocean Policy*, calls for enactment of the Administration's proposal. The purpose of the legislation is to provide clear authority for oversight of energy-related activities on the OCS.

OCS Resource Assessments

OCS oil production could increase to as much as 40 percent by 2010. Its contribution is projected to grow significantly over the next few years as the OCS is believed to hold about 60 percent and 41 percent of the Nation's remaining undiscovered oil and gas resources, respectively. It also may hold a potential future supply of methane hydrates that could, if it proves safe to develop, supply another important source of natural gas for domestic consumption.

MMS recently completed an interim update of estimates for undiscovered technically recoverable resources underlying the OCS. Our mean estimate is 76 billion barrels of oil and 406 tcf of natural gas, which is a 12 percent increase since 2000 for natural gas because of new information obtained from recent exploration in the Gulf of Mexico. MMS conducts a comprehensive national assessment of the undiscovered oil and gas resources on the OCS every 5 years. The main objective of these assessments is to forecast the oil and natural gas endowment of the U.S. OCS for planning purposes, but there is much uncertainty in the estimates for those areas which have been off limits to exploration and development for many years due to a lack of data. In portions of the eastern Gulf, the west coast and the Atlantic OCS, the last acquisition of geophysical data and drilling of exploration wells occurred more than 25 years ago.

Yet, in the interim there have been enormous advances in exploration and production technologies and a myriad of new drilling, completion, and production technologies that could be used in these frontier areas today. Additionally, worldwide, there has been an enormous amount of exploration and production activity in frontier offshore basins that would provide new geologic analogs and exploration and production insights to use in exploring frontier U.S. offshore basins.

The Nation's energy potential may not rest entirely on conventional hydrocarbon resources. Scientists are now studying the possibility that a unique and puzzling frozen "ice" crystal may hold the key to future energy resources. Methane hydrates are naturally occurring ice-like solids in which water molecules have trapped gas molecules. Hydrates are found in locations with high pressure and low temperature—over 98 percent of natural gas hydrate resources are estimated to occur in offshore ocean sediments. Discovering a method to locate, produce and transport the gas from formations to the market is key to their potential use.

The next MMS resource assessment, to be completed this summer, will also for the first time include a *preliminary* estimate of *technically recoverable* methane hydrate resource potential for the OCS. MMS is working closely with USGS to develop the methodology used in the hydrate assessment. In anticipation of industry's move to develop natural gas from methane hydrates, MMS is also developing a methodology for tract-specific resource economic evaluation for bid evaluation, mapping the Gulf of Mexico seafloor to assist in assessing hydrate resources, and funding studies on hydrates extraction technologies and their potential environmental impacts to facilitate development of environmentally protective measures. We are also participating in the Joint Industry Drilling Project (JIP) in the Gulf of Mexico. This project is a joint industry/Government research consortium to address the location and possible production of methane hydrates in the Gulf. Under the JIP, the consortium is now preparing to drill the first 2 boreholes in the Gulf of Mexico in order to assess drilling conditions.

Other information gathering efforts include the study of chemosynthetic communities that are associated with hydrate deposits, mapping the Gulf of Mexico seafloor to assist in assessing hydrate resources, and funding hydrate research activities conducted at the Center for Marine Resources and Environmental Technology.

5-year Oil and Natural Gas Leasing Program

The OCS Lands Act requires the Secretary of the Interior to prepare and maintain a schedule of proposed oil and gas lease sales on the Federal OCS that is determined to best meet national energy needs for the 5-year period following program approval. The 5-year program specifies the size, timing and location of areas proposed for Federal offshore oil and gas leasing. In order for a lease sale to be held on the OCS, the sale must be included in the 5-year program. To be on this schedule, the area must have been part of the multi-phased analyses required under section 18 of the OCSLA.

MMS's goal is to develop a program that is responsive to the Nation's energy needs, ensures environmental safeguards, and addresses public concerns. In developing the 5-year program, section 18 of the OCSLA requires that we analyze and compare areas of the OCS in terms of hydrocarbon potential, environmental sensitivity, and other factors. We also take into consideration laws and policies of affected coastal States.

MMS will soon commence the process for development of a new program for 2007–2012. Throughout the 2 to 3 year process of developing a new 5-year program, MMS consults with its constituents, ensuring that the program takes into account the concerns of all parties. The MMS requests comments from states, local and tribal governments, American Indian and Native Alaskan organizations, the oil and gas industry, federal agencies, environmental and other interest organizations, as well as the general public. Consultation with affected parties also occurs at the local level through MMS regional offices.

The current 5-year program for 2002-2007 includes 20 sales in eight OCS planning areas—annual sales in the Central and Western Gulf of Mexico and periodic sales in part of the Eastern Gulf of Mexico, Beaufort Sea and Cook Inlet, Alaska. Three other planning areas in Alaska—Norton Basin, Chukchi Sea, and Hope Basin—also have sales scheduled if there is any interest expressed by industry at the beginning of the sale process. Part or all of nine OCS planning areas are currently withdrawn from leasing consideration by the President under section 12 of the OCSLA until 2012 and by annual Congressional moratoria. These include North Aleutian Basin (recently Congress voted to eliminate the North Aleutian moratorium but the Presidential withdrawal is still in place), Alaska; Washington-Oregon; Northern, Central, and Southern California; most of the Eastern Gulf of Mexico; and South, Mid, and North Atlantic.

Protection of the Environment

MMS requires all operator plans for exploration and development have associated environmental documentation under the National Environmental Policy Act and they are also subject to CZMA provisions that allow review by coastal states. The OCSLA 1978 amendments mandated that the Department have a comprehensive environmental studies program to provide sound scientific analysis of the potential impacts of offshore development, and an Oil and Gas Information Program to provide offshore operators and Federal and State governments with data and information from OCS activities.

For example, in the Gulf of Mexico the development of deep water oil exploration and extraction has increased rapidly in recent years. During the last couple of years, strong bottom currents were reported during deep water exploratory operations. As a result, a series of deep mooring stations designed by MMS have been established to study the shelf/slope/rise dynamics to fill the information gap. One of the pilot studies for deep water currents was completed last year. The data collected included bottom pressure, velocity, temperature, and salinity depth profiles from various current meters and other sensors. After peer review of the findings, the results will be incorporated into our regulatory decision-making process and shared with all stakeholders.

In general the MMS regulatory requirements and monitoring of operations are specific and stringent concerning the performance of offshore oil and gas operations. For example, we require

- specific training for offshore workers in well control or production safety systems;
- installation, regular testing, and maintenance of drilling, production, and pipeline safety systems;
- submission for approval of exploration and development/production plans that include comprehensive environmental reports and oil spill contingency plans before operations start; and
- use of the best and safest technology available.

MMS also has a comprehensive accident investigation program followed by safety alerts to all companies to prevent recurrence of similar incidents; and an effective and vigorous civil and criminal penalties program.

Over the past three decades, MMS has established an enviable environmental and safety record. We have seen the oil-spill rate continue to drop from decade to decade resulting in a 67 percent decrease over this 30 year period. Offshore production is one of the safest ways to provide for our nation's oil and natural gas energy needs.

Safe Operations

The past five decades of experience and events have led the U.S. to a regulatory system that has a strong emphasis on environmental protection and safety of offshore workers. Indeed, the statistics show offshore to be one of the safer workplaces in America. The most recent MMS and Bureau of Labor Statistics data indicate that the offshore industry's injury and illness rate was almost 50 percent less than the petroleum industry as a whole.

The OCSLA mandates that MMS ensure safe and environmentally sound operations on the OCS through its regulations, including crucial and applicable applied research that supports regulatory requirements relative to safety and pollution-free operations. A wide variety of laws, regulations, and other communications between MMS and industry govern all offshore oil and gas leasing, exploration, development, and production activities.

The MMS and the offshore oil and gas industry share the paramount goal of preventing offshore accidents. Both work cooperatively to protect the environment and to keep workers safe. MMS also promotes international cooperation for research and development initiatives to enhance the safety of offshore oil and natural gas activities and the development of appropriate regulatory

program elements worldwide.

MMS has a permanent workforce inspecting offshore facilities for compliance with safety regulations and has particular expertise in the engineering, structural, and environmental issues related to building fixed facilities in the ocean. The MMS conducts over 20,000 inspections of offshore facilities a year and recently began an interagency partnership with the U.S. Coast Guard, in which MMS conducts inspections on behalf of that agency. The MMS also partners with Federal, state, and local agencies in standardizing oil spill plan requirements, response standards and in conducting regular drills. In addition, our comprehensive regulatory program includes:

- Technical and environmental reviews of all plans of exploration and development.
- A comprehensive program of inspection and enforcement which includes the issuance of civil and criminal penalties.
- Accident investigations, data collection, and analysis.
- An annual awards program that recognizes operators who conduct safe and environmentally sound operations.
- Technical research related to operational safety and oil spill response.
- Coordination with other agencies to ensure protection of our ocean resources as well as the Department of Homeland Security to ensure the security of critical assets.

To continue this admirable safety record, our goal is to use the “best available and safest technologies.” We must therefore continue to investigate technology, practices, and procedures that might further reduce risks to offshore workers and the environment. In that regard, our offshore program has benefited tremendously from our international research partnerships. For the past 25 years, we have worked with international agencies on offshore safety research projects — one quarter of our 529 safety and pollution prevention projects have involved international partners or contractors. Participating countries have included Canada, Norway, the UK, Sweden, Germany, France, Italy, Mexico, Brazil, Argentina, the Netherlands, Kazakhstan, Japan, Russia, Australia, and South Korea. This cooperation has enabled us to leverage our research funds and have access to the world’s leading technical specialists.

Science Based Decision-Making

MMS is committed to strong scientific research to ensure that decisions are based on the best available information. Reviewing environmental and technological issues that have been raised by state and local governments, other federal agencies, environmental groups, industry, as well as issues identified by MMS staff have helped shape our research agenda since the agency’s beginning. Working with colleges and universities, other federal and state agencies, and a variety of research firms, MMS identifies partnerships and opportunities to maximize research funding. Much of MMS research is accomplished through co-operative funding with universities, inter-agency agreements, and joint funding with industry.

MMS conducts research specific to issues associated with OCS mineral leasing and development.

- The **Environmental Studies Program** assesses the potential environmental risks of offshore development, provides information necessary to minimize any adverse risks, and provides a comprehensive database of baseline science that is critical to the OCS program decision-making. For example, MMS is working collaboratively with other agencies and academic and international experts to determine if offshore industry noise and marine seismic operations represent a threat to marine mammals and, if so, how to mitigate those effects. The *U.S. Ocean Action Plan* also recognizes MMS for its leadership in promotion of deep sea coral conservation and education through its ongoing survey of deep sea coral communities in the Gulf of Mexico.
- The **Oil Spill Research Program** provides information on oil spill response capabilities and conducts studies on spilled oil and its effect on the marine environment.
- The **Technology Assessment and Research Program** investigates and assesses safety and engineering related technologies. The results support the technology basis for MMS's permitting of drilling and production operations as well as other regulatory requirements.

The *U.S. Commission on Ocean Policy* in their final report to the President and to the Congress, acknowledged the role, and the success, of the MMS Environmental Studies Program (ESP). The Commission cited that the ESP “*is a major source of information about the impacts of OCS oil and gas activities on the human, marine, and coastal environments.*” To meet the increased demand for environmental information and to compensate for shrinking budgets, the MMS has aggressively sought opportunities to leverage its resources through partnering. For example, through close collaboration, the USGS continues to focus about \$2.5 million annually to meet some of the biological research needs of the MMS. MMS has also created research partnerships with universities in Louisiana and Alaska, leveraging federal funds on a one-to-one basis amounting to over \$3.0 million per year. MMS partners with other federal agencies including NASA, NOAA, EPA, DOE, and the Office of Naval Research on research projects when common interests exist, and recently has accomplished a number of its research objectives through leveraging opportunities under the auspices of the National Ocean Partnership Program.

This is a particularly exciting time for ocean science and resource management, and the MMS is in a unique position to participate with other agencies as a developer, implementer, and user of our Nation’s (Coastal) Integrated Ocean Observing System (IOOS) system being planned today. MMS has been involved in the development and planning of this System from the beginning. The MMS is a charter member of the National Oceanographic Partnership Program (NOPP) and the Executive Committee of its Ocean U.S. office, which stemmed from a congressional request to NOPP’s governing body, the National Ocean Research Leadership Council (Council), for “a plan to achieve a truly integrated ocean observing system.”

Even as the IOOS is being developed, the MMS and its industry partners are already contributing. Due to a need for more site-specific data for forecasting ocean currents that may affect structural design, fatigue criteria, or daily operations, MMS established and implemented an ocean current monitoring and data-sharing program in the Gulf of Mexico. Under this program, deep water oil and gas platform operators will collect ocean current data from deep

water drilling and production sites, and report to the National Oceanic and Atmospheric Administration National Data Buoy Center internet website making it publicly available to help ensure that OCS activities are conducted in a safe and environmentally sound manner.

Other ongoing MMS monitoring programs such as the Flower Garden Banks National Marine Sanctuary Monitoring Program, our Bowhead Whale Aerial Surveys, and our support for intertidal monitoring are well past the decadal mark and well placed to contribute to the biological components of IOOS.

MMS has been an active participant in Federal ocean efforts as a member of the National ocean partnership program and all of its subsidiary bodies. The *Ocean Action Plan* specifically recognizes its Deepwater Ocean Currents Monitoring Program as an important component of the proposed Integrated Ocean Observing System (IOOS).

MMS also supports the goal of advancing international ocean science and policy. MMS's expertise in managing OCS oil and gas and marine minerals has been acknowledged internationally. The MMS takes an active approach to identify and to become involved in international initiatives that promote better integration of safety and environmental concerns into offshore decision-making. To do this MMS focuses on:

- monitoring, developing, and refining safety and environmental standards;
- technical and information exchanges with our international regulatory counterparts; and
- providing technical advice to the U.S. Department of State.

Conclusion

The Department of the Interior remains committed to the production of traditional energy, as well as increased energy conservation, and alternative and renewable sources as critical components of the President's balanced, comprehensive policy. For this reason, the Department of the Interior has ensured that the OCS remains a solid contributor to the nation's energy needs. The relative contribution from federal offshore areas will increase in the upcoming years due to activity in deep water areas of the Gulf of Mexico.

Regarding the longer term, I should note that there are long lead times for accessing frontier areas of the OCS. Lease sales cannot be held unless they are part of the current 5-year program. Once a lease sale is held, it could take 5 to 10 years for drilling to commence. Production could take another 5 years after a discovery. In a very real sense, regarding OCS policy decisions, there are few "quick fixes."

The environmental record of the OCS program is outstanding. There has not been a significant platform spill in the last 35 years. Natural gas production offshore represents one of the most environmentally sound energy investments this country could make. A decision to not produce OCS resources also carries consequences. Mostly, it will mean more imported oil and LNG. Mostly, it will mean more imported oil and LNG from countries with less stringent environmental requirements and increased tanker traffic into U.S. waters.

In this time of uncertainty, MMS stands ready to respond-- to apply our best science, technical experience, and sound management principles to benefit the nation.

Mr. Chairman that concludes my statement. Please allow me to express my sincere appreciation for the continued support and interest of this committee for MMS's programs. It would be my pleasure to answer any questions you or other members of the Subcommittee may have at this time.
